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# The Tineoidea of Morocco (Lepidoptera: Meessiidae, Tineidae)

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# R. Gaedike

#### Abstract

As a result of the study of Tineoidea collected in Morocco, it was possible to establish the occurrence of 72 species (9 Meessiidae and 63 Tineidae). One species is described as new: *Anomalotinea tabelli* Gaedike, sp. n.. KEY WORDS: Lepidoptera, Tineoidea, Meessiidae, Tineidae, new species, Morocco.

# Los Tineoidea de Marruecos (Lepidoptera: Meessiidae, Tineidae)

#### Resumen

Como resultado del estudio de Tineoidea colectados en Marruecos, fue possible establecer la presencia de 72 especies (9 Meessiidae y 63 Tineidae). Se describe una especie como nueva *Anomalotinea tabelli* Gaedike, sp. n. PALABRAS CLAVE: Lepidoptera, Tineoidea, Meessiidare, Tineidae, nueva especie, Marruecos.

#### Introduction

The kindness of Lauri Kaila, Finnish Museum of Natural History, Helsinki, enabled me to study interesting material from Morocco, collected during recent years. The study prompted me to collate the records of the Tineoidea hitherto found in Morocco. The examined material, sent for determination to my predecessor G. Petersen and me in the past, is deposited in numerous collections (see abbreviations). The names of localities are written as they are on the labels.

#### Abbreviations

AZD Aqua-Zoo, Düsseldorf, Germany
coll. Baldizzone Giorgio Baldizzone, Asti, Italy
coll. Bettag Erich Bettag, Dudenhofen, Germany
coll. de Prins Willy de Prins, Brussels, Belgium
coll. Werno Andreas Werno, Neunkirchen, Germany

FMNH Finnish Museum of Natural History, Helsinki, Finland MNHN Muséum National d'Histoire Naturelle, Paris, France

MNVD Museum für Naturkunde und Vorgeschichte, Dessau, Germany

NMW Naturhistorisches Museum, Vienna, Austria

SDEI Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany

SMNK Staatliches Museum für Naturkunde, Karlsruhe, Germany SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany

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Berlin, Germany

ZMUC Zoological Museum, Copenhagen, Denmark ZSM Zoologische Staatssammlung, Munich, Germany

#### **MEESSIIDAE**

Tenaga nigripunctella (Haworth, 1828)

PETERSEN (1962); - PETERSEN & GAEDIKE (1979).

Infurcitinea marcunella (Rebel, 1901)

PETERSEN (1962); - PETERSEN & GAEDIKE (1979).

Infurcitinea frustigerella (Walsingham, 1907)

Examined material: Smimou, 1 &, 15-III-1974, leg. R. and E. Bender (SMNK); 7 km östlich [East of] Mogador, 1 &, 13-14-III-1974, leg. Friedel (SMNK); Moyen Atlas, Prov. Meknès, Ifrane, 2 & &, 28-IV-11-V-1967, leg. De Lajonquière (MNHN); Meknès-Tafilalet, 33°27'20"N, 5°2'18"W, Ifrane, 1920 m, 3 & &, 9-V-2011, leg. J. and A. Kullberg (FMNH); Prov. Ifrane, Michlifen, 2 & &, 9-10-V-2010, leg. J. Kullberg and Z. Kolev (FMNH); Tafrault, 1000 m, 1 &, 23-24-III-2005, leg. O. Karsholt (ZMUC).

Infurcitinea italicoides Gaedike, 2009

GAEDIKE (2009): Type localities: Imilil; Anezi; Arbaa Sahel.

Examined material: Ht. Atlas, Toublat-Massiv, Tamatert near Imilil, 2400 m, 31°9'N, 7°53'W, 2  $\circlearrowleft \circlearrowleft$ , 27-VII-2008, leg. A. Steiner (SMNK); Agadir, 21 km N, 635 m, 2  $\circlearrowleft \circlearrowleft$ , 22-V-2010, leg. Werno (coll. Werno); Agadir, 20 km N, 8  $\circlearrowleft \circlearrowleft$ , 25-IV-2014, leg. W. Mey (ZMHB); High Atlas, Ouirgane, 10 km W, 7  $\circlearrowleft \circlearrowleft$ , 30-V-3-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); High Atlas, Ljoukak, 18 km SW, 1300-1500 m, 1  $\circlearrowleft$ , 2-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); Anti Atlas, Ait Mansour, 1410 m, 1  $\circlearrowleft$ , 31-V-2010, leg. Werno (coll. Werno).

Infurcitinea atrifasciella (Staudinger, 1871)

PETERSEN & GAEDIKE (1979).

Examined material: Taroudanut, 1 & 21-V-1986, leg. Curletti, (coll. Baldizzone); Tizi n'Test, 1900 m, 1  $\$ , 26-V-1985, leg. Sama (coll. Baldizzone); dint. Khenitra, 2  $\$  1-V-1990, leg. Bassi; Olmi & Scaramozzino (coll. Baldizzone); El Ksiba, 32°31'39"N, 06°01'13"W, 2 & 3, 1  $\$ , 26-V-2005, leg. Werno (coll. Werno); Tahanaoute, 31°15'49"N, 07°52'50"W, 1  $\$ , 20-V-2005, leg. Werno (coll. Werno); Oukaimden, 2600 m, 31°12'14"N, 07°51'42"W, 1  $\$ , 23-V-2005, leg. Werno (coll. Werno); Oukaimden area, 31°10'N, 07°50'W, 2815 m, 1  $\$ , 28-VII-2008, leg. A. Steiner (SMNK); Marrakesch-Tensift-Al-Haouz-Asguine, 1  $\$ , 26-V-2010, leg. Werno (coll. Werno); Al Haouz, Ourika, 31°50'N, 7°40'W, 1  $\$ , 1  $\$ , 14-V-2011, leg. J. and A. Kullberg (FMNH); High Atlas, Ouirgane, 10 km W, 1  $\$ , 30-V-3-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); Prov. Azilal, Ail Bouzid, 14  $\$ 3, 2  $\$ 9, 30-IV-7-V-2015, leg. J. Kullberg (FMNH).

Infurcitinea maroccana Petersen & Gaedike, 1979

PETERSEN & GAEDIKE (1979): Type location: Oukaim'den.

Infurcitinea incertula (Meyrick, 1928)

MEYRICK (1928): Type locality: Tinmel; - GAEDIKE (2009).

Examined material: Marrakesch-Tensift-Al-Haouz, Tizi-n-Ted, 2045 m,  $2\ \delta\delta$ , 23-V-2010, leg. Werno (coll. Werno); Agadir, 21 km N, 635 m,  $1\$ 9, 22-V-2010, leg. Werno (coll. Werno); High Atlas, 12 km SW Ljoukak, 1300 m,  $4\ \delta\delta$ ,  $1\$ 9, 5-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); Anti Atlas, Tafraout, 12 km E, 1590 m,  $1\ \delta$ , 27-IV-2013, leg. J. Tabell (FMNH).

Infurcitinea parincertula Gaedike, 2019

GAEDIKE (2019a): Type locality: Ouirgane.

Infurcitinea maura Petersen, 1962

PETERSEN (1962): Type locality: Tangier; - GAEDIKE (2009).

#### **TINEIDAE**

Hapsifera multiguttella (Ragonot, 1895)

Examined material: Moyen Atlas, Beni Mellal, 1 &, VII-1972, leg. Friedel (SMNK); Prov. Tadia-Azilal, 7 km N Beni Mellal, 600 m, 1 &, 1 &, 27-V-2005, leg. Werno (coll. Werno); Marrakesch-Tensift-Al-Haouz, Tamaloula, 1 &, 8-VIII-2013, leg. Werno (coll. Werno); High Atlas, Ouirgane, 925 m, 2 & &, 30-31-V-2015, leg. Hviid, Karsholt and Larsen (ZMUC); High Atlas, 7 km S Ouirgane, 2 & &, 1 &, 5-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); High Atlas, 6 km NW Ouirgane, 1 &, 1-2-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); Prov. Essaouira: Douar Tisgharin, 540 m, 1 &, 22-IV-2015, leg. J. Kullberg (FMNH).

Rhodobates algiricella (Rebel, 1901)

PETERSEN & GAEDIKE (1979).

Rhodobates friedeli Petersen, 1987

PETERSEN (1987): Type location: Agadir-Rokein.

Examined material: Agadir O-Sous, 7 ♂♂, leg. Pinker (SMNK).

Morophaga morellus (Duponchel, 1838)

PETERSEN & GAEDIKE (1979).

Examined material: High Atlas, 7 km S Ouirgane, 950 m, 1  $\delta$ , 1-5-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); Rabat, Forêt de Mamora, 1  $\delta$ , 25-26-IV-1989, leg. Exp. Kopenhagen (ZMUC).

Morophaga choragella ([Denis & Schiffermüller], 1775)

GAEDIKE (2009).

Nemapogon inconditella (Lucas, 1956)

LUCAS (1956): Type location: Ifrane; - PETERSEN & GAEDIKE (1979) (under the name of the synonym *heydeni* Petersen, 1957).

Nemapogon agenjoi Petersen, 1959

GAEDIKE (2015a).

Examined material: High Atlas, Ljoukak, 23 km SW, 1 ♀, 2-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC).

Nemapogon palmella (Chrétien, 1908)

PETERSEN & GAEDIKE (1979).

Examined material: Agadir, 1  $\,$  Q, 20-28-IV-2009, leg. W. Mey (ZMHB); High Atlas, 6 km NW of Ouirgane, 31°12'29"N, 8°4'23"W, 1  $\,$  Q, 1-2-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); Demnate, 1070 m, 1  $\,$  Q, 22-XI-2014, leg. J. Kullber (ZMUC).

Nemapogon picarella (Clerck, 1759)

GAEDIKE (2009); - GAEDIKE (2015a).

Nemapogon sardicus Gaedike, 1983

GAEDIKE (2009).

Examined material: Anti Atlas, Tizi-Mlil, 1590 m, 1 ♂, 1-VI-2010, leg. Werno (coll. Werno); Marrakesch-Tensift-Al Haouz, Tiz-n-Test, 2045 m, 1 ♀, 29-V-2010, leg. Werno (coll. Werno); Marrakesch-Tensift-Al Haouz-Asguine, 1 ♂, 7-VI-2013, leg. Bläsius (coll. Werno); High Atlas, Oukaim'den, 2600 m, 2 ♂♂, 9-11-VIII-1975, leg. F. Kasy (NMW); High Atlas, Ouirgane, 925 m, 1 ♂, 30-31-V-2015, leg. Hviid; Karsholt and Larsen (ZMUC); High Atlas, 3 km N of Ouirgane, 950 m, 1 ♂, 1 ♀, 1-5-V-2016, leg. Hviid;

Larsen and Nilsson (ZMUC); High Atlas, 14 km E of Asni, 1820 m,  $1\,$   $^{\circ}$ , 1-5-V-2016, leg. Hviid; Larsen and Nilsson (ZMUC); Prov. Essaouira: Douar Tisgharin, 540 m,  $2\,$   $^{\circ}$ , 22-IV-2015, leg. J. Kullberg (FMNH); Prov. Tadla-Azilal, El Kaba,  $1\,$   $^{\circ}$ , 28-V-2005, leg. Werno (coll. Werno); Agadir,  $3\,$   $^{\circ}$   $^{\circ}$ , 18-29-III-1975, leg. K. Mikkola (FMNH).

Nemapogon granella (Linnaeus, 1758)

PETERSEN & GAEDIKE (1979).

Nemapogon variatella (Clemens, 1859)

Examined material: dint. Khenitra, 1 &, 1-V-1990, leg. Bassi & Scaramizzino (coll. Baldizzone).

Neurothaumasia ankerella (Mann, 1867)

GAEDIKE (2009).

Neurothaumasia ragusaella (Wocke, 1889)

PETERSEN & GAEDIKE (1979).

Examined material: Anti Atlas, Djebel Siroua, 30 km W Anzal, 1500 m, 1 &, 18-VI-2011, leg. R. Bläsius (coll. Werno).

Pachyarthra mediterraneae (Baker, 1894)

LUCAS (1933): Type locality of the synonym *Tineola pallidella*: Ouida; - LUCAS (1950): Type locality of the synonym *Euplocera variegata*: Sehouls; - PETERSEN & GAEDIKE (1979).

Examined material: Ademine, 1 \, middle of XI-1974, leg. Pinker (SMNK).

Pachyarthra lividella (Chrétien, 1915)

PETERSEN & GAEDIKE (1979).

Examined material: Agadir-Ademine, 35  $\circlearrowleft$   $\circlearrowleft$  , 1  $\circlearrowleft$ , XI-1974, leg. Friedel (SMNK; SDEI); Agadir-Rokein, 3 $\circlearrowleft$   $\circlearrowleft$  8-XI-1974, leg. Friedel (SMNK); env. of Agadir, 10  $\circlearrowleft$   $\circlearrowleft$  XI-1974, leg. Friedel (SMNK); env. of Agadir, 1  $\circlearrowleft$  26-X-2012, leg. Bläsius (coll. Werno); Agadir, O-Sous, 48  $\circlearrowleft$   $\circlearrowleft$  14  $\circlearrowleft$  19, leg. Pinker (SMNK; SDEI); Ademine, 1  $\circlearrowleft$  middle of XI-1974, leg. Pinker (SMNK); Agadir, Azrarag, 1  $\circlearrowleft$  24-IV-2012, leg. Bläsius (coll. Werno); Marrakesch-Tensift-Al Haouz-Tamaloukt, 700 m, 1  $\circlearrowleft$  19, 18-IV-2016, 21-VII-2012, leg. Bläsius (ZSM; coll. Werno).

Pachyarthra ochroplicella (Chrétien, 1915)

PETERSEN & GAEDIKE (1979).

Examined material: Agadir and env. of Agadir,  $3 \, \delta \, \delta$ ,  $1 \, \S$ , XI-1974, leg. Friedel (SMNK); 20 km N of Agadir, Vallée de Paradis,  $1 \, \delta$ , 7-VIII-2013, leg. Werno (coll. Werno); High Atlas, env. of Tacheddirt, 2300 m,  $22 \, \delta \, \delta$ , 8-22-VIII-1975, leg. Groß (AZD; SDEI); High Atlas, Tiz-n-Tichka, 2100 m,  $2 \, \delta \, \delta$ ,  $2 \, \S \, \S$ , 11-VIII-1997, leg. Bettag (coll. Bettag); High Atlas, Tiz-n-Test, 2100 m,  $4 \, \delta \, \delta$ , 4-X-1996, leg. Lingenhöle (SMNS); Marrakesch-Tensift-Al Haouz and Imi Nifri,  $2 \, \delta \, \delta$ , 12-VIII-2013, 13-VIII-2013, leg. Werno (coll. Werno); Anti Atlas, Tizi Teratine, 1900 m,  $1 \, \delta$ , 12-VIII-1975, leg. Groß (AZD).

Myrmecozela diacona Walsingham, 1907

PETERSEN & GAEDIKE (1979).

Examined material: Anti Atlas, Souk-el-Had-d'Afella-Irhir, 1 &, 2-IV-1997, leg. Hoppe (ZSM).

Myrmecozela ataxella (Chrétien, 1905)

Examined material: Anti Atlas, 15 km SW Tirhmi, 1 &, 31-I-1990, leg. De Freina (ZSM); env. of Tamegroute, Vallée du Dráa, 1 &, 12-II-1996, leg. Hoppe (ZSM).

Ateliotum petrinella (Herrich-Schäffer, 1854)

Examined material: High Atlas, Toubkal-Massiv, Oukaimden area, 31°10'N, 7°50'W, 2815 m, 1 &, 3-

VIII-2008, leg. A. Steiner (SMNK); High Atlas, 23 km SW Ljoukat, 1 &, 2-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); Maknès-Tafilalet, 32°35'N, 4°33'W, 2170 m, 1 &, leg. J. and A. Kullberg (FMNH).

# Cephimallota tunesiella (Zagulajev, 1966)

Examined material: Grand Atlas, Ijoukak, 1 ♀, 10-20-IX-1937, leg. Jourdan.

## Cephimallota crassiflavella Bruand, 1851

Examined material: Marrakesch-tensift-El Khaouz Asguine, 970 m, 1 &, 4-VI-2010, leg. Werno (coll. Werno).

## Edosa lardatella (Lederer, 1858)

PETERSEN & GAEDIKE (1979).

Examined material: Val d'Ifrane,  $1\ \$ , 25-29-X-1974, leg. Friedel (SMNK); Agdz,  $1\ \$ 3, 11-IV-1976, leg. Thomas (MNVD); Vallée du Draa, Tagounite, 700 m,  $1\ \$ 3, 29-III-1997, leg. Hoppe (ZSM); Souss-Massa-Draa, Anezi, 10 km W, 800 m,  $1\ \$ 9, 17-V-2005, leg. M. Meyer (coll. Werno); Prov. Meknès-Tafilalet Azrou, 1600 m,  $1\ \$ 3, 28-V-2005, leg. Werno (coll. Werno); Tafilalt, Taznakt, 1000 m,  $3\ \$ 3,  $1\ \$ 9, 8-IV-1980, leg. Thomas (MNVD); Sahara, Zugora,  $4\ \$ 3, 4-16-IV-1974, leg. Bender (SMNK); High Atlas, Asni, 1150 m,  $1\ \$ 3, 7-9-V-1974, leg. Bender (SMNK); Tinerhir, 1350 m,  $3\ \ \$ 3, 6-8-V-1973, leg. Bender (SMNK).

# Perissomastix biskraella (Rebel, 1901)

PETERSEN & GAEDIKE (1979).

Examined material: High Atlas, Asni, 1150 m, 4 &\$\delta\$, 7-9-V-1974, leg. Bender (SMNK); Ksar-es-Souk, 30 km O of Tinehir, 1 &\$\delta\$, 14-VIII-1975, leg. Groß (AZD); Westsahara, 2 km S of Faun Agoutir, 2 &\$\delta\$, 1-VI-2000, leg. Hoppe (ZSM).

#### Crassicornella agenjoi (Petersen, 1957)

PETERSEN (1962); - PETERSEN & GAEDIKE (1979).

Examined material: Houed Korifla, 80 km SE Rabat,  $1\ \mathring{\circ}$ , 13-V-1988, leg. Curletti (coll. Baldizzone); Ifrane, 1700 m, 25-VII-1975,  $6\ \mathring{\circ}\ \mathring{\circ}$ , leg. Groß (AZD); Tabarka,  $1\ \mathring{\circ}$ , 29-VII-3-VIII-1995, leg. Mey (ZMHB); Meknès-tafilalet, Azrou, 1600 m,  $2\ \mathring{\circ}\ \mathring{\circ}$ , 28-V-2005, leg. Meyer (coll. Werno); Tangier,  $7\ \mathring{\circ}\ \mathring{\circ}$ , VII-VIII-1934, leg. Querci (MNHN).

#### Crassicornella zernyi (Petersen, 1957)

PETERSEN (1957a): Type locality: Tachdirt; - PETERSEN & GAEDIKE (1979); - GAEDIKE (2009).

Examined material: numerous specimens (over eighty) from entire country.

# Crassicornella hirundinea (Meyrick, 1928)

PETERSEN & GAEDIKE (1979).

Examined material: Tizi-n' Test, 1900 m,  $3\ \delta\delta$ , 25-V-1985, leg. Sama (coll. Baldizzone); Agadir and env. of Agadir,  $3\ \delta\delta$ ,  $1\$ , 16-IV-2012, leg. Müller (ZMHB); 25-IV-2014, leg. Mey (ZMHB); 10-III-2012, leg. Bläsius (coll. Werno); Middle Atlas, Prov. Ifrane,  $4\ \delta\delta$ , 7-9-V-2010, leg. Kullberg & Kolev (FMNH).

#### Ceratuncus maroccanella (Amsel, 1951)

AMSEL (1951): Type locality: Goundafa.

Examined material: High Atlas, Oukaimden, 1600 m, 11-18-VI-1933, 1 &, leg. Zerny (NMW); High Atlas, Asni, 1200 m, 2 &&, 6-VII-1984, leg. de Prins (coll. de Prins); High Atlas, 10 km NW Ouirgane, 1050 m, 1 &, 30-V-3-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); High Atlas, Ljoukak, 23 km SW, 1 &, 2-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC) Marrakesch-Tensift-El Haouz-Asguine, 970 m, 1 &, 3-VI-2010, leg. Werno (coll. Werno).

# Reisserita karsholti Gaedike, 2009

GAEDIKE (2009): Type locality: Sidi Kaould, 25km S Essaouira.

Examined material: 6 km SE Essaouira, 1 ♂, 26-27-IV-2015, leg. J. Kullberg (FMNH).

Reisserita meyi Gaedike, 2015

GAEDIKE (2015): Type locality: Agadir.

Reisserita cinnamomella Gaedike, 2015

GAEDIKE (2015): Type locality: Midelt.

Reisserita bettagi Gaedike, 2009

GAEDIKE (2009): Type locality: Ifrane.

Reisserita chalcopterella (Zerny, 1935)

ZERNY (1935): Type locality: Tachdirt; - GAEDIKE (2009).

Examined material: High Atlas, Telouet, 2900 m, 1 &, 11-VIII-1997, leg. Bettag (coll. Bettag); High Atlas, 9 and 10 km NW Ouirgane, 31°12′50″N, 8°4′24″W, 4 &&, leg. Hviid; Karsholt and Larsen (ZMUC); High Atlas, Prov. Taroudant, Tamaloukt, 700 m, 1 &, 10-VI-2013, leg. Bläsius (coll. Werno); Demnale, env. of Tizi-n-Azioun, 1 &, 27-VI-2013, leg. Bläsius (coll. Werno).

Reisserita stengeli Gaedike, 2009

GAEDIKE (2009): Type locality: Moyen Atlas, Forêt des Cedres.

Reisserita luteopterella Petersen, 1957

PETERSEN (1957): Type locality: Goundafa; - GAEDIKE (2009).

Examined material: Tinin, 29°43'35"N, 9°16'33"W, 1 &, 16-V-2005, leg. Werno (coll. Werno); Marrakesch-Tensift-Al Haouz, Tiz-n-Test, 2645 m, 3 &&, 8-VI-2013, leg. Bläsius; 11-VIII-2013, leg. Werno (coll. Werno).

Reisserita parva Petersen & Gaedike, 1979

PETERSEN & GAEDIKE (1979): Paratype location: Tangier.

Anomalotinea pseudoranella (Petersen & Gaedike, 1979)

PETERSEN & GAEDIKE (1979): Type location: Sangal (under the genus name *Reisserita*).

Anomalotinea paepalella (Walsingham, 1907)

GAEDIKE (2009).

Anomalotinea fulvescentella (Lucas, 1956)

LUCAS (1956): Type locality: Ifrane; - PETERSEN & GAEDIKE (1979): Type locality: Oukaimden and Azrou (of the synonym *maroccana* Petersen & Gaedike, 1979).

Examined material: numerous additional specimens (34  $\delta\delta$ ) from the type locality Ifrane in coll. SMNK; NMW; AZD; SDEI; ZSM; Marrakesch-Tensift-El Haouz-Asguine, 1  $\delta$ , 4-VI-2010, leg. Werno (coll. Werno); Marrakesch-Tensift-El Haouz-Fadh rat, 2580 m, 2  $\delta\delta$ , 2-VII-2013, leg. Bläsius (coll. Werno).

Anomalotinea tisliticola Gaedike & Kullberg, 2015

GAEDIKE & KULLBERG (2015): Type locality: Prov. Er Rachidia, Lake Tislit.

Anomalotinea wernoi Gaedike, 2009

GAEDIKE (2009): Type locality: Tinn.

Examined material: Anti Atlas, Tizi-Mlil, 1590 m, 2 &&, 1-VI-2010, leg. Werno (coll. Werno); Agadir, residence Al Faras, 2 &&, 20-28-IV-2009, leg. Mey (ZMHB).

Anomalotinea derrai Gaedike, 2009

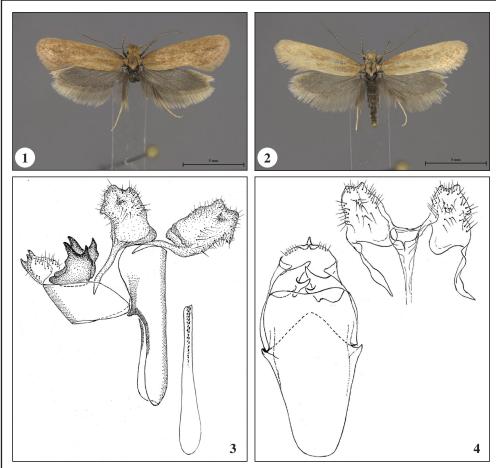
GAEDIKE (2009): Type locality: Mischliften.

Anomalotinea hviidi Gaedike, 2019

GAEDIKE (2019a): Type locality: Ouirgane.

# Anomalotinea tabelli Gaedike, sp. n.

Material examined: Holotype ♂: Morocco, El Hajeb Prov., El Hajeb 2,8km WNW, 860 m, N 33.69072 W 5.40304, 15-V-2016, J. Tabell leg.; Gen.präp. [genitalia slide] Gaedike NR. 9716; Holotypus ♂, *Anomalotinea tabelli* sp. n., det. R. Gaedike 2019 (FMNH). Paratypes: 6 ♂♂, with same dates, three of them with slides NR. 9712, 9713, 9717 (FMNH; SDEI); 1 ♂, Morocco, El Hajeb Prov., El Hajeb 3,3 km WNW, 820 m, N 33.68944 W 5.40940, 17-V-2016, J. Tabell leg.; Gen.präp. [genitalia slide] Gaedike NR. 9711 (FMNH).



Figs 1-4.— Anomalotinea tabelli Gaedike, sp. n. 1-2. Paratypes, Morocco, El Hajeb Prov.. 3-4. Male paratypes, Morocco, El Hajeb Prov.

Description (figs 1-2): Wingspan 15-17mm; head brush dark yellow-brown, area from neck to insertion of antenna somewhat lighter; scape of antenna with same coloration, with pecten, flagellum ringed, nearly 2/4 of the length of forewing; palpus also yellowish-brown, lighter on inside, second segment with numerous long bristle-shaped scales; thorax and tegulae yellow-brown, forewing with same coloration, without any pattern; hindwing grey.

Variation: Some specimens with pale yellow coloration (see fig. 2).

Male genitalia (figs 3-4): Uncus with hook-shaped tip, characteristically for the genus; gnathos arms unusually broad, proximally forked, with two pointed tips; saccus broad, laterally with more strongly sclerotized hook-like edge (connection with tegumen), narrower to rounded tip; valva somewhat longer than gnathos, more or less parallel-sided, ventral edge straight, costal edge at 1/2 and costal and ventral angles proximally each with small blunt process, on inside near proximal edge with small bristled process, somewhat different sized on each valva; transtilla narrow, as long as valva; phallus as long as saccus, with row of minute more strongly sclerotized thorns. Valvae on ventral edge connected with a structure (juxta or anellus?).

Female genitalia: Unknown.

Diagnosis: Superficially not clearly distinguishable from other members of the genus, but the genitalia structure shows some distinct differences. The shape of gnathos arms and valvae, especially the very long transtilla are unique in the genus.

Etymology: Named in honour of the collector, Jukka Tabell.

Trichophaga tapetzella (Linnaeus, 1758)

Trichophaga bipartitella (Ragonot, 1892)

Examined material: Agadir-Ademine, 1  $\,^{\circ}$ , XI-1974, leg. Friedel (SMNK); 40 km S Larache, 1  $\,^{\circ}$ , 1  $\,^{\circ}$ , 23-24-IV-1989, Exp. Mus. Copenhagen (ZMUC); Prov. Merlef, Tizlit, 1  $\,^{\circ}$ , 1  $\,^{\circ}$ , 12-IV-2015, leg. Tabell (FMNH); Prov. Setlat, Oulad Abhou, 1  $\,^{\circ}$ , 10-IV-2015, leg. Tabell (FMNH).

Trichophaga robinsoni Gaedike & Karsholt, 2001

Examined material: Sous, Inezgane,  $2\ \delta\delta$ ,  $3\ \$\$$ , 17-18-III-1974, leg. Bender (SMNK); 37 km SE Bouizkarn, Oasis Tachjicht, 550 m,  $2\ \delta\delta$ , 3-II-1990, leg. de Freina (SMNK); Agadir, O-Sous,  $1\ \delta$ , leg. Pinker (SMNK); 2 km S Foun Agoutir, 65 km E Torfaya,  $1\ \delta$ ,  $1\ \$$ , 1-VI-2000, leg. Hoppe (ZSM); Anti Atlas, 12 km E Assaka,  $1\ \delta$ ,  $1\ \$$ , 31-V-2000, leg. Hoppe (ZSM); High Atlas, Taroudant,  $1\ \delta$ , 27-V-1995, leg. Macek.

Ceratophaga infuscatella (Joannis, 1897)

PETERSEN & GAEDIKE (1979).

Elatobia fuliginosella (Lienig & Zeller, 1846)

GAEDIKE (2009).

Elatobia maroccana Gaedike, 2019

GAEDIKE (2019a): Type localities: North of Taroudant; Agadir; Idni.

Examined material: Prov. Settat, 2,5 km E Said Machou, 100 m, 1 &, 18-V-2016, leg. Tabell (FMNH): First record beside type series.

Tineola bisselliella (Hummel, 1823)

Examined material: High Atlas, 23km SW Ljoukak, 1 ♀, 2-VI-2015, leg. Hviid; Karsholt & Larsen (ZMUC).

Tinea murariella Staudinger, 1859

ROBINSON (1979).

Examined material: Agadir,  $3 \delta \delta$ ,  $1 \circ$ , 18-29-III-1975, leg. Mikkola (FMNH); Essouira,  $1 \delta$ , 28-IV-2009, leg. Mey (ZMHB).

Tinea dubiella Stainton, 1859

ROBINSON (1979); - PETERSEN & GAEDIKE (1979) (under the name of the synonym *turicensis* Müller-Rutz, 1920).

Tinea flavescentella Haworth, 1828

GAEDIKE (2019).

Tinea basifasciella Ragonot, 1895

Examined material: High Atlas, Asni, 1200 m, 1  $\,$   $\,$  6-VII-1984, leg. de prins (coll. de Prins); High Atlas, Ljoukak, 23 km SW, 1600 m, 1  $\,$   $\,$  2-VI-2015, leg. Hviid; Karsholt and Larsen (ZMUC); High Atlas, Agadir, vic. Val Paradis, Tifrit, 1  $\,$  3, 24-IV-2016, leg. Bläsius (coll. Werno); Tahanaoute, Tizn-Tagatout, 2  $\,$  3 $\,$  3, 20-V-2005, leg. Werno (coll. Werno); Prov. Meknés-Tafilalet, Azrou, 1  $\,$  30-V-2005, leg. Werno (coll. Werno); Rabat, 1  $\,$  3, 20-IV-1942, leg. Rungs (MNHN).

Niditinea fuscella (Linnaeus, 1758)

PETERSEN & GAEDIKE (1979).

Examined material: Ouezzane, 300 m, 1  $^{\circ}$ , 21-22-IV-1989, Exp. Mus. Copenhagen (ZMUC); Moyen Atlas, Ifrane, 1  $^{\circ}$ , 5-10-VII-1972, leg. Hahn (ZSM).

Proterospastis autochthones (Walsingham, 1907)

GAEDIKE (2019).

Proterospastis orientalis (Petersen, 1959)

GAEDIKE (2019).

Examined material: High Atlas, Ouirgane, 11 km S, 1 &, 30-31-V-2015, leg. Hviid; Karsholt and Larsen (ZMUC).

Monopis imella (Hübner, [1813])

Monopis crocicapitella (Clemens, 1859)

TURATI (1919): Type locality of the synonym cecconii: Tanger.

Monopis nigricantella (Millière, 1872)

Examined material: Ouezzane, 1 &, 21-23-IV-1989, Exp. Zool. Mus. Copenhagen (ZMUC); 40 km S Larache, 1 &, 23-24-IV-1989, Exp. Zool. Mus. Copenhagen (ZMUC).

Xerantica tephroclysta Meyrick, 1930

ROBINSON; GAEDIKE; BLÄSIUS & BETTAG (2006), - GAEDIKE (2007).

Examined material: Prov. Ouerzazate, Gorge du Oades, 8 km Nait Bou Allal, N 31,42, W 6,02, 2 specimens, 23-VI-2005, leg. N. Pöll.

Amphixystis maroccana Gaedike, 2009

GAEDIKE (2009): Type locality: Sidi Ifni.

Examined material: 21 km N of Agadir, 1 &, 8-VIII-2013, leg. Werno (coll. Werno); 20 km N Agadir, 4 &&, 25-IV-2014, leg. Mey (ZMHB; SDEI).

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